

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 09/150,947 G  
Source: IFW16  
Date Processed by STIC: 09/15/2005

# ***ENTERED***



IFW16

**RAW SEQUENCE LISTING**

DATE: 09/15/2005

PATENT APPLICATION: US/09/150,947G

TIME: 11:40:46

Input Set : A:\séquence listing.txt

Output Set: N:\CRF4\09152005\I150947G.raw

```

3 <110> APPLICANT: KAEMPFER, Raymond
4     ARAD, Gila
6 <120> TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS ANTAGONISTS VACCINES
8 <130> FILE REFERENCE: KAEMPFER1
10 <140> CURRENT APPLICATION NUMBER: 09/150,947G
11 <141> CURRENT FILING DATE: 1998-09-10
13 <150> PRIOR APPLICATION NUMBER: PCT/IL97/00438
14 <151> PRIOR FILING DATE: 1997-12-30
16 <150> PRIOR APPLICATION NUMBER: ISRAEL 119938
17 <151> PRIOR FILING DATE: 1996-12-30
19 <160> NUMBER OF SEQ ID NOS: 15
21 <170> SOFTWARE: PatentIn version 3.3
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 12
25 <212> TYPE: PRT
26 <213> ORGANISM: Staphylococcus aureus
28 <400> SEQUENCE: 1
30 Thr Asn Lys Lys Lys Val Thr Ala Gln Glu Leu Asp
31 1           5           10
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 12
36 <212> TYPE: PRT
37 <213> ORGANISM: Staphylococcus aureus
39 <400> SEQUENCE: 2
41 Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp
42 1           5           10
45 <210> SEQ ID NO: 3
46 <211> LENGTH: 10
47 <212> TYPE: PRT
48 <213> ORGANISM: Staphylococcus aureus
50 <400> SEQUENCE: 3
52 Lys Lys Lys Val Thr Ala Gln Glu Leu Asp
53 1           5           10
56 <210> SEQ ID NO: 4
57 <211> LENGTH: 10
58 <212> TYPE: PRT
59 <213> ORGANISM: Staphylococcus aureus
61 <400> SEQUENCE: 4
63 Lys Lys Lys Ala Thr Val Gln Glu Leu Asp
64 1           5           10
67 <210> SEQ ID NO: 5
68 <211> LENGTH: 13
69 <212> TYPE: PRT

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70 <213> ORGANISM: Staphylococcus aureus
73 <220> FEATURE:
74 <221> NAME/KEY: LIPID
75 <222> LOCATION: (1)..(1)
76 <223> OTHER INFORMATION: N-lauryl cysteine residue
78 <400> SEQUENCE: 5
80 Cys Thr Asn Lys Lys Lys Val Thr Ala Gln Glu Leu Asp
81 1          5          10
84 <210> SEQ ID NO: 6
85 <211> LENGTH: 13
86 <212> TYPE: PRT
87 <213> ORGANISM: Staphylococcus aureus
90 <220> FEATURE:
91 <221> NAME/KEY: LIPID
92 <222> LOCATION: (1)..(1)
93 <223> OTHER INFORMATION: N-lauryl cysteine residue
95 <400> SEQUENCE: 6
97 Cys Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp
98 1          5          10
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 24
103 <212> TYPE: PRT
104 <213> ORGANISM: Staphylococcus aureus
106 <400> SEQUENCE: 7
108 Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Tyr Asn Lys Lys
109 1          5          10          15
112 Lys Ala Thr Val Gln Glu Leu Asp
113          20
116 <210> SEQ ID NO: 8
117 <211> LENGTH: 36
118 <212> TYPE: PRT
119 <213> ORGANISM: Staphylococcus aureus
121 <400> SEQUENCE: 8
123 Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Tyr Asn Lys Lys
124 1          5          10          15
127 Lys Ala Thr Val Gln Glu Leu Asp Tyr Asn Lys Lys Lys Ala Thr Val
128          20          25          30
131 Gln Glu Leu Asp
132          35
135 <210> SEQ ID NO: 9
136 <211> LENGTH: 14
137 <212> TYPE: PRT
138 <213> ORGANISM: Staphylococcus aureus
141 <220> FEATURE:
142 <221> NAME/KEY: DISULFID
143 <222> LOCATION: (1)..(1)
145 <220> FEATURE:
146 <221> NAME/KEY: DISULFID
147 <222> LOCATION: (14)..(14)

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149 <400> SEQUENCE: 9
151 Cys Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Cys
152 1          5          10
155 <210> SEQ ID NO: 10
156 <211> LENGTH: 14
157 <212> TYPE: PRT
158 <213> ORGANISM: Staphylococcus aureus
161 <220> FEATURE:
162 <221> NAME/KEY: MOD_RES
163 <222> LOCATION: (1)..(1)
164 <223> OTHER INFORMATION: D-alanine
166 <220> FEATURE:
167 <221> NAME/KEY: MOD_RES
168 <222> LOCATION: (14)..(14)
169 <223> OTHER INFORMATION: D-alanine
171 <400> SEQUENCE: 10
173 Ala Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Ala
174 1          5          10
177 <210> SEQ ID NO: 11
178 <211> LENGTH: 13
179 <212> TYPE: PRT
180 <213> ORGANISM: Staphylococcus aureus
183 <220> FEATURE:
184 <221> NAME/KEY: ACETYLTATION
185 <222> LOCATION: (1)..(1)
187 <220> FEATURE:
188 <221> NAME/KEY: MOD_RES
189 <222> LOCATION: (13)..(13)
190 <223> OTHER INFORMATION: D-alanine
192 <400> SEQUENCE: 11
194 Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Ala
195 1          5          10
198 <210> SEQ ID NO: 12
199 <211> LENGTH: 239
200 <212> TYPE: PRT
201 <213> ORGANISM: Staphylococcus aureus
203 <400> SEQUENCE: 12
205 Glu Ser Gln Pro Asp Pro Lys Pro Asp Glu Leu His Lys Ser Ser Lys
206 1          5          10          15
209 Phe Thr Gly Leu Met Glu Asn Met Lys Val Leu Tyr Asp Asp Asn His
210          20          25          30
213 Val Ser Ala Ile Asn Val Lys Ser Ile Asp Gln Phe Leu Tyr Phe Asp
214          35          40          45
217 Leu Ile Tyr Ser Ile Lys Asp Thr Lys Leu Gly Asn Tyr Asp Asn Val
218          50          55          60
221 Arg Val Glu Phe Lys Asn Lys Asp Leu Ala Asp Lys Tyr Lys Asp Lys
222 65          70          75          80
225 Tyr Val Asp Val Phe Gly Ala Asn Tyr Tyr Gln Cys Tyr Phe Ser
226          85          90          95

```

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229 Lys Lys Thr Asn Asp Ile Asn Ser His Glu Thr Asp Lys Arg Lys Thr
230           100           105           110
233 Cys Met Tyr Gly Gly Val Thr Glu His Asn Gly Asn Gln Leu Asp Lys
234           115           120           125
237 Tyr Arg Ser Ile Thr Val Arg Val Phe Glu Asp Gly Lys Asn Leu Leu
238           130           135           140
241 Ser Phe Asp Val Gln Thr Asn Lys Lys Lys Val Thr Ala Gln Glu Leu
242 145           150           155           160
245 Asp Tyr Leu Thr Arg His Tyr Leu Val Lys Asn Lys Lys Leu Tyr Glu
246           165           170           175
249 Phe Asn Asn Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Asn
250           180           185           190
253 Glu Asn Ser Phe Trp Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
254           195           200           205
257 Asp Gln Ser Lys Tyr Leu Met Met Tyr Asn Asp Asn Lys Met Val Asp
258           210           215           220
261 Ser Lys Asp Val Lys Ile Glu Val Tyr Leu Thr Thr Lys Lys Lys
262 225           230           235

```

265 &lt;210&gt; SEQ ID NO: 13

266 &lt;211&gt; LENGTH: 10

267 &lt;212&gt; TYPE: PRT

268 &lt;213&gt; ORGANISM: Artificial

270 &lt;220&gt; FEATURE:

271 &lt;223&gt; OTHER INFORMATION: Consensus sequence

274 &lt;220&gt; FEATURE:

275 &lt;221&gt; NAME/KEY: UNSURE

276 &lt;222&gt; LOCATION: (3)..(6)

277 &lt;223&gt; OTHER INFORMATION: Any amino acid

279 &lt;400&gt; SEQUENCE: 13

W--&gt; 281 Lys Lys Xaa Xaa Xaa Xaa Gln Glu Leu Asp

282 1 5 10

285 &lt;210&gt; SEQ ID NO: 14

286 &lt;211&gt; LENGTH: 12

287 &lt;212&gt; TYPE: PRT

288 &lt;213&gt; ORGANISM: Artificial

290 &lt;220&gt; FEATURE:

291 &lt;223&gt; OTHER INFORMATION: Consensus sequence

294 &lt;220&gt; FEATURE:

295 &lt;221&gt; NAME/KEY: UNSURE

296 &lt;222&gt; LOCATION: (1)..(2)

297 &lt;223&gt; OTHER INFORMATION: Any amino acid

299 &lt;220&gt; FEATURE:

300 &lt;221&gt; NAME/KEY: UNSURE

301 &lt;222&gt; LOCATION: (5)..(8)

302 &lt;223&gt; OTHER INFORMATION: Any amino acid

304 &lt;400&gt; SEQUENCE: 14

W--&gt; 306 Xaa Xaa Lys Lys Xaa Xaa Xaa Xaa Gln Glu Leu Asp

307 1 5 10

310 &lt;210&gt; SEQ ID NO: 15

## RAW SEQUENCE LISTING

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Input Set : A:\sequence listing.txt

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311 <211> LENGTH: 11
312 <212> TYPE: PRT
313 <213> ORGANISM: Artificial
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Consensus sequence
319 <220> FEATURE:
320 <221> NAME/KEY: misc_feature
321 <222> LOCATION: (1)..(1)
322 <223> OTHER INFORMATION: Can be either Tyr or Thr
324 <220> FEATURE:
325 <221> NAME/KEY: UNSURE
326 <222> LOCATION: (3)..(8)
327 <223> OTHER INFORMATION: Any amino acid
329 <220> FEATURE:
330 <221> NAME/KEY: UNSURE
331 <222> LOCATION: (10)..(10)
332 <223> OTHER INFORMATION: Any amino acid
334 <400> SEQUENCE: 15
W--> 336 Xaa Lys Xaa Xaa Xaa Xaa Xaa Xaa Glu Xaa Asp
337 1 5 10

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 09/15/2005  
PATENT APPLICATION: US/09/150,947G      TIME: 11:40:47

Input Set : A:\sequence listing.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; Xaa Pos. 3,4,5,6  
Seq#:14; Xaa Pos. 1,2,5,6,7,8  
Seq#:15; Xaa Pos. 1,3,4,5,6,7,8,10

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:13,14,15

**VERIFICATION SUMMARY**

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TIME: 11:40:47

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\09152005\I150947G.raw

L:281 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0

L:306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0

L:336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0